

WHAT IS CLAIMED IS:

1. A battery pack locking device for a portable wireless terminal comprising:
a first locking section formed on a lower casing frame included in a body of the
portable wireless terminal, and adapted to lock the battery pack to the lower casing
5 frame and to release the lock of the battery pack;

a button section integrally formed with the first locking section, the button
section being movable in a direction perpendicular to the lower casing frame;

a second locking section interacting with the first locking section to separate
the battery pack from the lower casing frame in the perpendicular direction; and

10 a support section for supporting the battery pack to allow the battery pack to be
locked and lock-released in the perpendicular direction.

2. A battery pack locking device for locking a battery pack to a lower casing
frame included in a portable wireless terminal, comprising:

a button member mounted on the lower casing frame while being movable in
15 a direction perpendicular to the lower casing frame, the button member having a first
lock releasing section;

a locking section protrusion protruded toward the battery pack from an end
surface of the lower casing frame facing the button member;

a second lock releasing section adapted to be subjected to a depression of the
20 first lock releasing section when the button member moves in the perpendicular
direction;

a lock retaining section arranged adjacent to the second lock releasing section,

and adapted to be engagable with the locking section to prevent the battery pack from being lock-released; and

an elastic section installed at one end of the battery pack, the elastic section being elastically deformable in accordance with the depression of the first lock releasing section.

3. The battery pack locking device according to claim 2, wherein each of the first and second lock releasing sections has a round surface, and the first lock releasing section presses the second lock releasing section when the button member is depressed, so that the elastic section is elastically deformed, thereby releasing a lock retained between the locking section and the lock retaining section.

4. The battery pack locking device according to claim 2, wherein the lock retaining section has a round lower surface which the locking section presses when the battery pack is to be locked, thereby causing the elastic section to be elastically deformed.

5. The battery pack locking device according to claim 2, wherein the lock retaining section has an inclined lower surface which the locking section presses when the battery pack is to be locked, thereby causing the elastic section to be elastically deformed.

6. The battery pack locking device according to claim 2, further comprising:
support sections protruded from the other end of the battery pack; and
support grooves engagable with the support sections, respectively, each of the
support grooves pressing an associated one of the support sections engaged therewith,
5 thereby causing the battery pack to separate from the lower casing frame and
elastically lift a desired distance in the perpendicular direction when the locking
device is released.

7. A battery pack locking device for locking a battery pack to a lower casing
frame included in a portable wireless terminal, comprising:
10 a button member mounted to the lower casing frame while being movable in
a direction perpendicular to the lower casing frame;
a pair of spaced tension sections extending downwardly from the button while
facing each other, the tension sections having an elasticity to be movable in the
perpendicular direction;
15 inner protrusions inwardly protruded from the tension sections while facing
each other, respectively; and
a locking section provided at one end of the battery pack to be engagable with
the tension sections, the locking section having, at opposite lateral surfaces thereof,
outer protrusions adapted to come into slidable contact with the inner protrusions,
20 respectively;
whereby the battery pack is locked to the lower casing frame when the outer
protrusions are positioned beneath the inner protrusions.

8. The battery pack locking device according to claim 7, wherein:

the locking section extends downwardly from a top surface of a rib groove formed at the one end of the battery pack; and

the tension sections extend beyond an end of the button member toward the battery pack, so that as the tension sections are positioned in the rib groove when the battery pack is locked to the lower casing frame.

9. The battery pack locking device according to claim 7, further comprising:

elastic means arranged beneath the button member, whereby the inner protrusions are moved beneath the outer protrusions of the locking section when the button member is depressed against an elastic force of the elastic means, and the button member is moved in the perpendicular direction by the elastic force of the elastic means when the depression of the button member is released, so that the inner protrusions move the outer protrusions in the perpendicular direction, thereby causing the battery pack to separate from the lower casing frame.

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